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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,337	10/17/2001	Yukihiro Kihara		7712

23364 7590 12/01/2004

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EXAMINER	
BEFUMO, JENNA LEIGH	
ART UNIT	**PAPER NUMBER**
1771	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/869,337	KIHARA ET AL.	
	Examiner	Art Unit	
	Jenna-Leigh Befumo	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 September 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-14* is/are pending in the application.

4a) Of the above claim(s) *2,4 and 7-13* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3,5,6 and 14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Amendment submitted on September 22, 2004, has been entered. Claim 1 has been cancelled. Claims 3, 5, and 6 have been amended and claim 14 has been added. Therefore, the pending claims are 2 – 14. Claims 2, 4, and 7 – 13 are withdrawn from consideration as being drawn to a nonelected invention.

Specification

2. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 3, 5, 6, and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The disclosure does not teach one of ordinary skill in the art how component A and component B are stuck together. While the disclosure teaches that the components are stuck together and they can be split at the stuck portion, there is no explanation what is done to stick the components together, or what is meant by stuck together? Are the filaments formed separately and then thermally or adhesively

bonded to each other, either continuously or discontinuously, along the length of the fibers? The use of the term throughout the specification seems to imply that the separate components are already formed into individual fibers before they are stuck together. Or, are the fibers stuck together during the extrusion process by creating a bicomponent fiber? While it is true that the disclosure discusses extruding bicomponent fibers, the specification does not equate the sticking process to the extrusion process. Therefore, the disclosure fails to teach one how to "stick" the fibers together.

5. Further, the disclosure fails to clearly teach one of ordinary skill in the art how to "exfoliate the sticking of said splittable fibers". While the disclosure mentions that the fibers can be exfoliated and that the exfoliated surfaces are uneven or have microfibrils, the disclosure does not teach what is done to exfoliate the fiber surface. The term exfoliating generally means to remove material from the surface. Thus, it would imply that the exfoliating step roughens up the surface of the fiber by a process such as sanding, to remove material from the fiber and create an uneven surface. Or, is the exfoliating step the same as the splitting step? If so, how is the uneven surface or microfibrils produced by the crumpling or buckling treatments. Even when the fibers are split by a water needling and needle punching process the fiber surface would not inherently become rough or uneven as a result. The processes would need to be preformed under high pressure which would roughen the surface and split the fibers. Further, the applicant does not teach that the splitting treatments are used to exfoliate the fibers or create any sort of rough fiber surface. Hence, the disclosure fails to teach how to exfoliate the fibers.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 3, 5, 6, and 14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. The term "woven" in claim 14 is indefinite. The fabric is initially defined as a nonwoven in line 1 of claim 14 and then described as a "woven" fabric in line 5. Since the applicant is only claiming a single fabric layer the fabric cannot be both types of materials. Thus, it is unclear whether the applicant is claiming a woven or nonwoven fabric. Therefore, claim 14 is indefinite. Claims 3, 5, and 6 are rejected due to their dependency on claim 14. For purposes of examination, the claim is interpreted as requiring either a nonwoven or woven fabric.

9. The phrase "each of which is formed by sticking" in claim 14 is indefinite. It is unclear what structure is produced by sticking the fiber together. Is the fiber just a bicomponent fiber, formed by extruding the two components together? Or, is the fiber formed by adhesively or thermally bonding the two fiber components together either discontinuously of continuously along the length of the fiber? Therefore, claim 14 is indefinite. Claims 3, 5, and 6 are rejected due to their dependency on claim 14. For purposes of examination, the term will read on any fabric having two different fiber components which are attached or stuck together by any possible means.

10. The term "exfoliating" in claim 14 is indefinite. It is unclear what the applicant means by exfoliating and what structure is produced by exfoliating the fiber. First, is the applicant claiming a process which produces a rough, uneven surface on the fibers, such as sanding? Or instead, is the applicant claiming a process which splits the components in the bicomponent fiber to produce split fibers instead of bicomponent fibers? And does this process need to roughen or

remove material from the fiber's surface? Does the final product contain individual fibers which have been split apart to form smaller fibers or is the final product made from bicomponent fibers with an uneven surface? For purposes of examination, the term "exfoliating" is interpreted as any process which at least partially splits of separates the two fiber components from each other.

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claims 3, 5, 6, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gillespie et al. (5,783,503) in view of Kuraray (JP 402289220, JP 2293457, or JP 02091219) and either Chen (6,395,957), Dugan et al. (6,093,491), or Takai (5,356,572).

The features of these references have been set forth in section 3 of the previous Office Action. However, the previous rejection listed a Japanese reference incorrectly. The rejection should have been over JP 02091219 instead of JP 2506419.

Response to Arguments

13. Applicant's arguments filed April 12, 2004 have been fully considered but they are not persuasive. In the arguments, the Applicant addresses how none of the individual references teaches the invention teaches the invention as a whole (response, page 4). However, the applicant does not specifically address why one of ordinary skill would not combine the cited references to produce the claimed product, as set forth in the rejection. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re*

Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

14. Further, the applicant argues that using the polyoxyalkyeneglycol and the plasma treatment in combination would produce unexpected results (response, page 5). However, the applicant's chart shows that each treatment by itself would improve the water absorbing properties as set forth in the prior art references. Therefore, it would have been obvious to one of ordinary skill in the art that using the two treatments in combination with each other would improve the water absorbing properties of the fabric as compared to using each treatment individually. Thus, the improved results produced by the combination of the two treatments would not have been unexpected. Further, it is noted that applicant is not claiming that the fabric has improved water absorbing properties or that the combination of the two treatments prevents deterioration in the water-absorbing properties. However, the features upon which applicant relies are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the rejection is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jenna-Leigh Befumo
November 18, 2004